

Fig.1

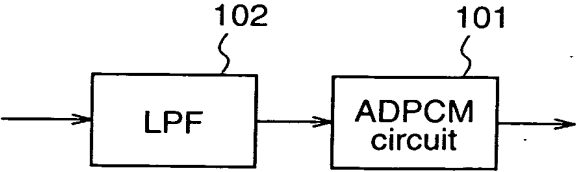


Fig.2

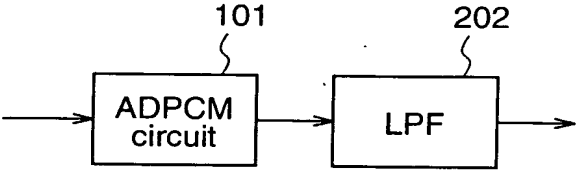


Fig.3

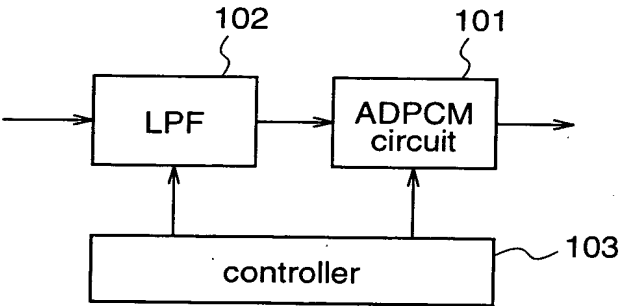


Fig.4

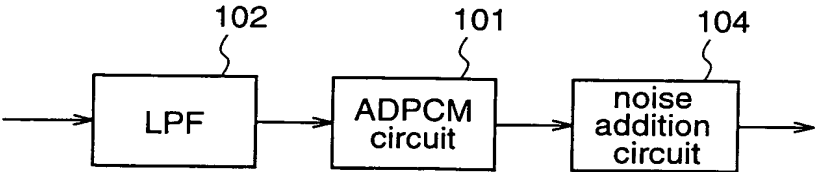


Fig.5

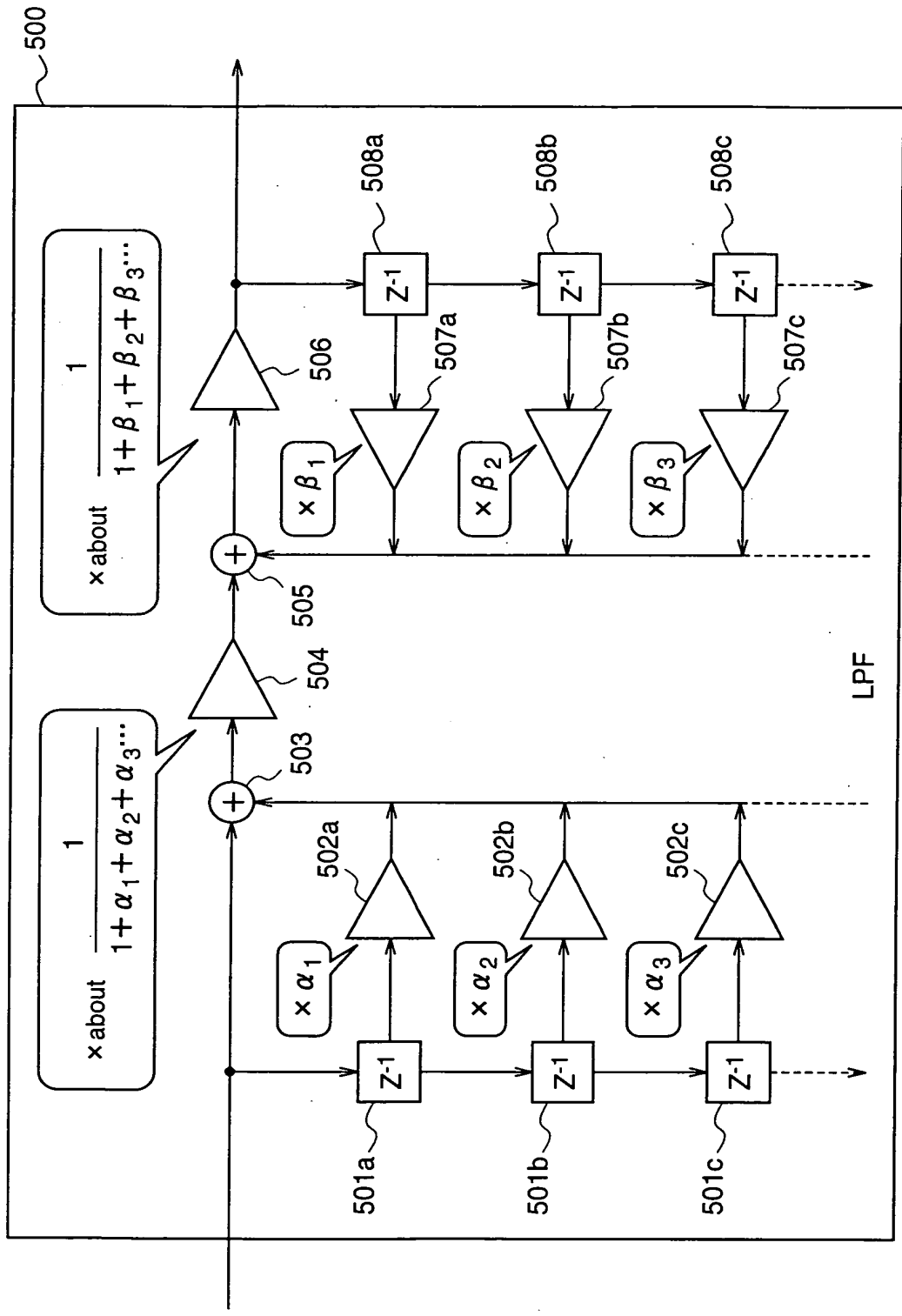


Fig.6

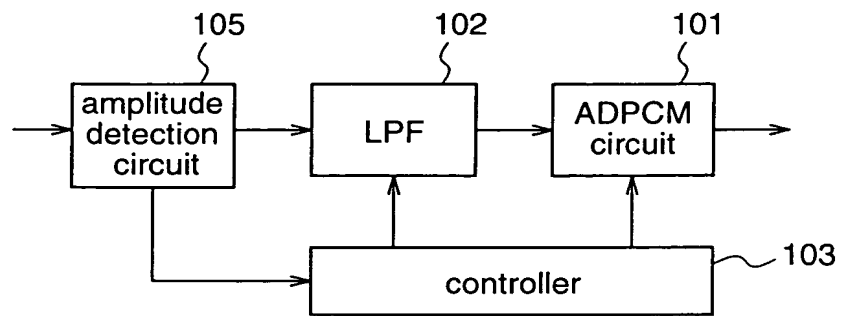
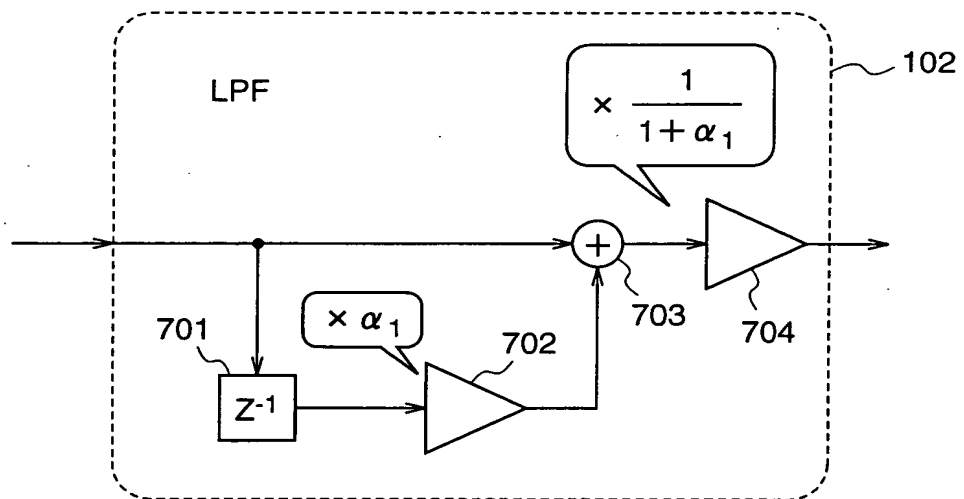


Fig.7



The diagram illustrates a digital signal processing system for a disk drive. The system components and their interconnections are as follows:

- 801**: A disk with a central hole.
- 802**: A head positioned above the disk.
- 803**: A head amplifier that receives signals from the head 802.
- 804**: A digital signal processing circuit that receives signals from the head amplifier 803.
- 805**: A feedback loop (indicated by a dashed box) containing:
 - A low-pass filter (LPF) block.
 - A delay element Z^{-1} (labeled 812).
 - A feedback gain block $\times \alpha_1$ (labeled 813).
 - A summing junction (labeled 814) that adds the output of the LPF to the output of the feedback gain block.
 - A gain block $\times \frac{1}{1 + \alpha_1}$ (labeled 815) that receives the output of the summing junction.
- 806**: An ADPCM circuit that receives signals from the digital signal processing circuit 804 and the feedback loop 805.
- 807**: A controller that provides control signals to the ADPCM circuit 806 and the feedback loop 805.
- 808**: Semiconductor memory connected to the ADPCM circuit 806.
- 809**: A D/A converter that receives signals from the ADPCM circuit 806.
- 810**: An amplifier that receives signals from the D/A converter 809.
- 811**: A speaker that receives signals from the amplifier 810.

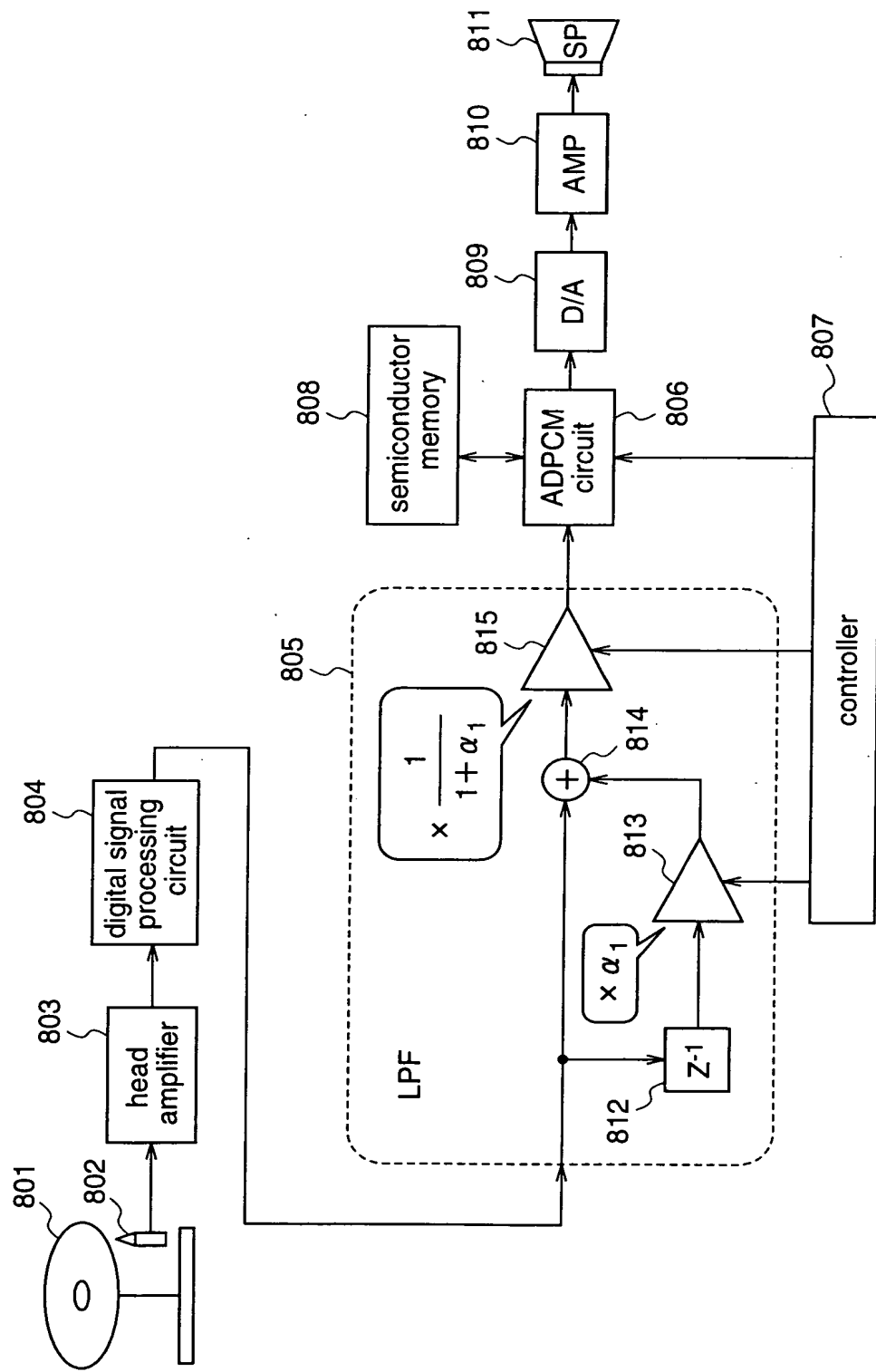


Fig.9

